- "1st. That the arteries to which pressure is applicable being far more frequently the subject of spontaneous aneurism than those to which it is inapplicable, compression promises to supersede the ligature in the great majority of cases.
- "2dly. Pressure has several obvious advantages over the ligature, being applicable to a considerable number of cases in which the ligature is contraindicated or inadmissible.
- "3dly. The treatment of aneurism by compression does not involve the slightest risk, and even if it should fail, its employment not only does not preclude the subsequent operation by ligature, but renders the chances of the ligature more favourable.
- "4thly. Such an amount of pressure is never necessary as will cause inflammation and adhesion of the opposed surfaces of the vessel at the point compressed.
- "5thly. Compression should not be carried even so far as completely to intercept the circulation in the artery at the point compressed; the consolidation of the aneurism will be more certainly and more quickly brought about, and with less inconvenience to the patient, by allowing a feeble current of blood to pass through the sac of the aneurism.
- "6thly. Compression by means of two or more iustruments, one of which is alternately relaxed, is much more effectual than by any single instrument.
- "7thly. Compression, according to this method, is neither very tedious nor very painful, and can be maintained in a great measure by the patient himself.
- "8thly. An aneurism cured by compression of the artery above the tumour, according to the mode laid down, is much less likely to return than when the ligature had been employed."
- 35. Large Erectile Tumour of the Neck cured by an injection of aromatic wine. By M. Riberi, Professor of Clinical Surgery, at Turin.—A countrywoman, 46 years of age, strong, of a sanguine temperament, catamenia regular, subject to cerebral congestions, the mother of eight children, was received at the clinique in consequence of an erectile tumour in the right lateral region of the neck. This tumour was of the size of a turkey's egg; not painful, soft, elastic, without pulsation or discoloration of the skin; base broad and seemingly lost between the muscles and the large vessels of the region. By pressing it uniformly and gradually it disappeared entirely or distributed itself beneath the skin and muscles, and there then remained a few small isolated tumours between the muscles and particularly behind the sterno-cleido-mastoid. When the pressure was removed, the tumour gradually reappeared. The tumour had first appeared three years ago; it was small, and after 28 months, it had scarcely acquired the size of a walnut. At this period the patient confided herself to the care of a quack, who endeavoured to cure her by puncturing the tumour with a small stilet made of hard wood; this occasioned severe pain, and subsequently, violent hemorrhages, which could only be controlled by the actual cautery. From this time the tumour increased rapidly in size, and then pain was experienced in it and in the adjacent parts. These characters led to the inference that it was an erectile tumour, subcutaneous and intermuscular at the same time. The situation of the tumour precluded compression; its prolongations into the deep-seated tissues rendered vaccination, cauterization, excision, the ligature and the seton alike inapplicable. Prof. R. resolved then to inject the tumour with aromatic wine, by the aid of Awl's syringe. He circumscribed firmly the base of the tumour by a ring of paste-board in the hands of an assistant; punctured it near its centre with an ordinary needle; inserted the mouth of the syringe into the puncture, and injected the liquid. He allowed the wine to remain in the tumour a few moments, and then forced it out by moderate pressure made all around the tumour. He used the aromatic wine in this case; the reaction which follows it being slighter than that which ensues after the introduction of ordinary wine. After the injection the tumour remained hard and tense. He directed bladders of pounded ice to be constantly applied to it. The next day the tumour was painful; the adjacent parts swollen, with a general febrile reaction two bleedings were practised, in quick succession, rigorous diet enjoined, and the ice was continued. On the third day, the volume of the tumour increased;

progressive diminution in size on the following days. On the 17th day, the whole mass had dwindled to the size of a small pea. The cure was complete.

The author, who had before successfully practised this method, closes his essay with the following corollaries: 1st, the efficacy of vinous injection in erectile tumours is indubitable; it is suprising in some instances; 2d, this efficacy is not limited exclusively to superficial or cutaneous erectile tumours, it applies equally well to the deep seated. It is applicable not only to erectile tumours of the face, but also to those seated in other parts of the body. 3d, there are cases of this latter kind which it is useless to attempt to cure excepting by the injections in question. 4th, the injection is more efficacious, if it is made with wine in which aromatic herbs, as lavender, rosemary, etc., have been boiled.—Annales de Therapeutiques, Oct., 1844, from Gior. Della Sci. Med. di Torino, Aug., 1844.

- 36. Hereditary brittleness of the Bones. By Dr. Pauli.—Many instances are recorded in which individuals have been affected with a sort of constitutional brittleness of the bones, and in whom fractures have happened with an unfortunate degree of facility. But we are not aware that this disposition has been observed in several members of the same family, so as to be in a manner hereditary. This has induced us to republish entirely the following article, extracted from a work of Dr. Pauli, of Landau.
- "In the commune of Offenbach there resides a family, all the members of which have already had fractures. Three of them have each had two fractures; another three, either of the arm or of the leg; one has even had so many as five fractures of one or the other extremity; and to produce these injuries no considerable violence was in general requisite. The father and grandfather before them had fractures of the limbs. This family, moreover, is a very healthy one; there does not appear to be any scrofulous or other taint in operation. It is remarkable that not one of them suffered a fracture before the age of 8, so that one might suppose that this particular fragility of the osseous matter was developed only towards the age of puberty. It would seem, however, that the condition of this fragility consists in some change of the chemical constituents of the bones in their relations to each other.
- "It has been very frequently observed that men addicted to the use of brandy often experience fractures, (in consequence of a degree of brittleness induced in the bones), which require a long course of treatment to insure their consolidation. I met with this great fragility of the bones, in a subject of this kind, a man 54 years of age, who hung himself 3 years ago at Goecklengen; the ribs, particularly, snapped like glass; and a very moderate force sufficed to fracture the long bones. But if fractures in these old drunkards are cured only very slowly, precisely the contrary is the case in the family above-mentioned; for in every instance which occurs in it, the fracture is very speedily consolidated, so that generally the callus is perfectly firm at the end of three weeks. I should add, too, that when the same bone has been broken a second time, it has never occurred at the seat of the callus.—Journ. de Chirurgie, Jan., 1845, from Untersuchungen und Erfuhrungen aus dem Gebiete de Chirurgie.
- 37. Strength of Bones and the manner in which they resist External Violence.—M. Chaissagnac read a memoir on this subject before the French Academy of Medicine, on the 1st of April. The following are his conclusions:—

1. The various mechanisms by which external violence fractures the bones are —a. Avulsion or elongation. b. Bending. c. Crushing. d. Torsion.

2. When external violence tends to curve a bone, the convex fibres are elongated, and those on the concave side shortened; but between those elongated and shortened fibres there are intermediate fibres which retain their natural length so long as the curvature does not exceed certain limits.

3. The long bones having almost the figure of a three-sided prism, follow the aw of solidity of that solid.

4. A triangular prism, loaded on one of its angles, resists much more powerfully than when loaded on one of its surfaces.

5. The most resisting angle of the bony prisms is that on which external causes most commonly tend to produce fracture.